VENTED BAG DUMP STATION

Installation, Operation, and Maintenance Manual





INDUSTRIES, INC. 16 PAINTER STREET MUNCY, PA 17756

FOREWORD

This manual contains instructions for installation, operation and maintenance of Young Industries' unfiltered dump stations. The care taken during receiving, storage, installation, operation and continued maintenance will add to the reliable operation and long service life of this equipment.

This manual should be read and understood in its entirety by the operator and the director of plant safety before performing any work on or operating an unfiltered dump station. Contact Young Industries for additional copies which may be required to ensure the dump station is being operated safely and according to the recommended procedures included in this manual.

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SAFETY

READ AND FULLY UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR PERFORMING ANY WORK ON A YOUNG DUMP STATION.

If you have previously received delivery of a Young dump station and are just now receiving this manual, insist that both the dump station operator and the director of plant safety read and fully understand this manual prior to continued use of and/or performing any maintenance on the dump station.

Notify Young Industries if your dump station does not include safety warning labels or devices recommended within this manual, which you believe may be important to improve the safe operation or maintenance of your dump station installation. Contact the Engineer Manager for assistance at 570/546-3165 prior to continued use or maintenance.

Notify Young Industries if you have sold, leased, rented or given any Young dump station to another user. Your assistance will allow Young Industries to contact the new user with updated safety and/or operational recommendations.

Safety is a fundamental factor that must be considered at all times in the operation and maintenance of mechanical equipment. Use of proper tools and methods can prevent serious accidents that may result in injury to you and your fellow workers.

A number of safety precautions are listed throughout this manual. Study them carefully and follow them; insist that those working with you do the same. Remember: an accident can easily be caused by someone's carelessness or negligence.

The various precautions and recommendations detailed within this manual **are not necessarily** all inclusive. Young Industries has attempted to provide SAFETY AND OPERATIONAL GUIDANCE relating to

typical installations with which we are familiar. We urge you to review your particular dump station installation to determine whether there are potential hazards beyond the warnings of this manual.

If you have any safety or operational questions pertaining to the design or application of a Young dump station as it relates to your particular installation, please contact the Engineer Manager, Young Industries, telephone 570/546-3165.

Failure to observe and follow the safety precautions may result in serious personal injury or property damage.

Young Industries looks to our customer to achieve a cooperative effort for the purpose of making each dump station installation as safe for the operator as is reasonably possible and to insure proper maintenance and operating procedures are followed. Many times we do not have access to the installation; therefore, your participation in the safe installation, operation and maintenance of each demonstration is critical.

WARNING - ELECTRICAL GROUNDING AND BONDING ARE REQUIRED

- Ungrounded machinery presents a potential hazard of fatal electrical shock from electrical power sources. Static electricity may also accumulate on ungrounded equipment. Static electricity discharge may cause an explosion or fire if flammable vapor or dust is present.
- Electrical equipment must be installed by a certified professional electrician.
- · Before operating any equipment, grounding and bonding must be completed in accordance

with the National Electrical Code (NFPA 70) published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, and any other applicable national, state or municipal codes. Codes for safe control of static electricity must also be observed, including the National Fire Code NFPA 77 "Recommended Practice on Static electricity" and any of the applicable national, state or municipal codes.

- To avoid hazardous static discharge, mobile, movable or portable equipment which may contact
 or come near to other equipment and which is not specifically prohibited by codes from being
 connected to ground must be safely grounded and bonded before close approach
 made. This warning also applies to movable containers such as drums, totes, boxes and bags.
- Sections of pipe, duct and gravity spout must be bonded to adjacent sections of pipe, duct, spout or equipment and must have a conductive path to electrical ground.
- Regular periodic safety inspections of electrical systems and grounding/bonding systems are required.

INSTALLATION

A. Receiving and Inspection

- 1. Upon receipt of equipment and material from Young Industries the following basic steps should be taken:
 - a. Use the packing list to determine that all the items shipped have been received. Your equipment order was carefully crated or packaged for safe shipment when given to the carrier. Check for damage.
 - (1) Damage in transit is the responsibility of the carrier. Be sure to have the driver sign a copy of the freight bill with a notation about any damage.
 - (2) If a shipment was sent to you by parcel post, have the postmaster complete a damage claim report.
 - (3) Concealed damage: If equipment or goods are discovered to be damaged by shipment at a later date, contact the carrier and Young Industries immedi-ately.
 - (4) IN ALL CASES OF DAMAGE IN TRANSIT, CONTACT THE YOUNG INDUSTRIES ENGINEER MANAGER AT 570/546-3165 FOR ASSISTANCE IN DETERMINING WHETHER OR NOT THIS DAMAGE MAY IN ANY WAY AFFECT SAFETY OR PROPER OPERATION OF A BAG DUMP SATION

(5) If shipped UPS, **DO NOT THROW ORIGINAL CARTON AWAY.** Keep all evidence for the inspector.

NOTE:

YOUNG INDUSTRIES CANNOT ASSUME ANY LIABILITY FOR SHORTAGES OR DAMAGED GOODS. CLAIMS MUST BE NEGOTIATED WITH THE CARRIER. CONTACT THE YOUNG INDUSTRIES ENGINEER MANAGER AT 570/546-3165 FOR ASSISTANCE IN RECTIFYING ANY SHORTAGE OR DAMAGE AS IT RELATES TO SAFE AND PROPER OPERATION OF A DUMP STATION.

- 2. Moving the Dump Station
 - a. Moving and installation should always be performed by trained, experienced personnel, using safe and accepted rigging practices.

CAUTION:

WHEN MOVING Α DUMP STATION OR COMPONENT PARTS, BE SURE THAT MOVING PRACTICES USED ARE SAFE FOR BOTH PERSONNEL AND EQUIPMENT. CONTACT THE YOUNG INDUSTRIES ENGINEER MANAGER IF THERE ARE ANY QUESTIONS RELATING TO WHAT CONSTITUTES SAFE AND ACCEPTED RIGGING **PRACTICES** FOR MOVEMENT AND/OR INSTALLATION OF A DUMP STATION.

b. Care and caution should be exercised to prevent damaging the housing, flanges, and vent tube.

- 3. Storing the Dump Station
 - a. If moved to storage, the equipment should be located in a dry area, preferably inside. Outside storage will require adequate protection from the weather.
 - b. The dump station has been shipped with temporary guards or covers. Do not remove these guards or covers while the dump station is in storage.
 - c. After prolonged storage and prior to startup, the dump station shall be inspected by a qualified person. Contact Young Industries Engineer Manager at 570/546-3165 for assistance.

CAUTION:

USE CAUTION TO PROTECT AGAINST FALLING OBJECTS OR DEBRIS FROM ENTERING OR DAMAGING THE DUMP STATION.

B. Supports

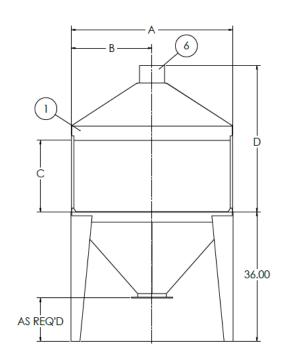
- A Young Industries dump station is designed to be supported and anchored to a rigid support base.
 - a. A dump station with a hopper is supplied with four support legs with anchor bolt holes.
 - b. A dump station without a hopper is supplied with a support flange for bolting directly to another machine.
- 2. Securely anchor the dump station by bolting.
 - a. The support for a dump station must be structurally adequate to support an operating dump station with the hopper full of product.

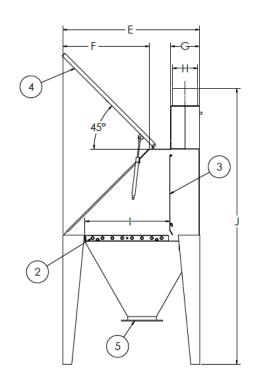
C. Assembly

 Locate the dump station with provision for sufficient clearance for a vent line and general use.

D. Precommissioning

- Prior to operating or test running the dump station, check internally for cleanliness, using caution to avoid physical harm to personnel and equipment.
- 2. Inspect the installation to assure the dump station is installed properly and mounted securely.
- 3. Inspect the dump station to assure that all guards, covers and safety equipment are in place and working properly.
- 4. We urge the installation crew to notify the plant safety committee and/or the plant engineer when installation is complete and prior to initial operation. Those in your plant responsible for plant safety should review your dump station installation prior to operation for safety in light of the extensive operating recommendations made within this manual. Con- tact the Engineer Manager at Young Industries, telephone 570/546-3165, if this review results in additional questions or uncertainty.





LEGEND:

- (1) BAG DUMP STATION WITH DUST HOOD AND VENT CONNECTION
- 2 SUPPORT GRATING, REMOVABLE
- (3) BAFFLE, REMOVABLE
 - HINGED CHARGE OPENING DOOR
- (5) DISCHARGE, FLANGED SIZE AS REQUIRED
- (6) VENT CONNECTION FOR ATTACHING TO DUST COLLECTION SYSTEM

OPERATION

A. Start -Up

- 1. Prior to actual operation, the operator must familiarize themselves with the method of starting and stopping the dump station and the status of supporting utilities.
- 2. The general appearance of the dump station and surrounding area should be visually inspected to determine that the dump station can be operated safely and without damage.

CAUTION:

DISCONNECT POWER IF APPLICABLE BEFORE SERVICING.

3. If your particular installation has an unsafe condition unforeseen by Young Industries and beyond typical operating conditions, CEASE FURTHER OPERATION of the dump station and immediately notify both your safety committee and the Engineer Manager at Young Industries, telephone 570/546-3165. The Young Industries Engineer Manager can assist you in speeding the return of your dump station to a recommended operating condition.

B. Continuous Operation

- During dump station operation the operator should recognize and report any unusual noise or vibration. Notify your maintenance personnel or call Young Industries for assistance or additional guidance in defining these conditions. Refer also to the maintenance section of this manual.
- 2. Guards, covers and safety equipment shall be in place whenever the dump station is in

CAUTION:

service.

DISCONNECT POWER IF APPLICABLE BEFORE SERVICING.

3. The dump station is designed and selected to meet specific operating conditions. Care shall be exercised to assure that the dump station is operated within safe limits. The dump station should be used only for the purpose for which it is designed. Refer to Young Industries quotation to determine the application for which this dump station was intended. Contact the Sales Manager at Young Industries, Painter Street, Muncy, PA 17756, if you need assistance in determining the proper application of this Young Industries' dump station.

C. Shut-Down

- When shutting down a dump station, shut off supporting utilities in accordance with plant operating procedures.
- 2. When cleaning or servicing is required on the dump station, proper lock-out of electrical, compressed gas and mechanical equipment should be completed before the work is started.

CAUTION:

DISCONNECT POWER IF APPLICABLE BEFORE CLEANING OR SERVICING.

MAINTENANCE

C. General Inspection

- Check product outlet connection for tightness.
- 2. Check dump station support.

- 3. Observe dust collection at dump station inlet.
- 4. Inspect all safety equipment, guards, covers and labels to assure the dump station and auxiliary equipment can be operated safely. If an unsafe condition is observed, cease further operation of the dump station and

MAINTENANCE

immediately notify both your safety committee and the Engineer Manager at Young Industries, telephone 570/546-3165.

DANGER:

DISCONNECT POWER SUPPLY BEFORE SERVICING.

D. Troubleshooting

1. When properly installed, operated and maintained your Young Industries dump station will give years of service. Table One, "Troubleshooting Dump Stations," gives symptoms, causes and remedies for most problems that may be encountered.

E. Spare Parts

 A nameplate is furnished with each dump station. The necessary information for ordering spare parts is found on this nameplate. When ordering, please provide (a) SHOP NUMBER and (b) SERIAL NUMBER. Contact the Parts Department Manager at Young Industries. telephone 570/546-3165, for assistance.

CAUTION

DO NOT OPERATE WITH GUARDS OR COVERS REMOVED.

DANGER

DISCONNECT POWER BEFORE SERVICING.

TABLE ONE - TROUBLESHOOTING DUMP STATIONS

SYMPTOM	CAUSE	REMEDY
Insufficient dust	Air Draw from vent is	Ensure Air Draw is as follows:
control	insuficient	Typ. Air Draw, 150-250 fpm (CFM)
		560-933
		717-1194
		950-1583
		1125-1875